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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/617,077

07/10/2003

Jose Luis Moctezuma de la Barrera

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EXAMINER

JOHNSON III, HENRY M

ART UNIT

PAPER NUMBER

3739

MAIL DATE

DELIVERY MODE

11/09/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/617,077

Applicant(s)

MOCTEZUMA DE LA BARRERA ET AL.

Examiner

Henry M. Johnson, III

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 71-73, 75, 76, 78-80, 89-93, 95 and 97-105 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 71-73, 75, 76, 78-80, 89-93, 95, 97-101, 103 and 104 is/are rejected.
- 7) ☒ Claim(s) 102 and 105 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 27, 2007 has been entered.

Response to Arguments

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection. The Applicant's Declaration has been considered as discussed below. However, the examiner determined that Malackowski et al. did not clearly teach an attached display and has provided a 35 U.S.C. 103 rejection based on Malackowski et al. and Adair.

The Declaration under 37 CFR 1.132 filed September 27, 2007 is insufficient to overcome the rejection of claims based upon Malackowski et al. as set forth in the last Office action because: the declaration is based on a saw as the power consuming instrument. Malackowski et al. clearly teaches the smart instrument may be any tool that may deliver some kind of energy to alter a patient's tissues. Thus it could be an LED or semiconductor laser with a small power requirement that could indeed share the power of a lithium battery as the claims only require a power consuming actuator. The examiner further takes the position that a skilled artisan would provide power as appropriate for the devices in the handpiece making this an obvious design choice. The Applicant teaches the power supplies may be common or separate, thus supporting this position. A skilled artisan would also consider advances in battery and display technology.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 80 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 80 recites the limitation "the powered surgical tool" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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Claims 71-73, 76, 79, 80, 89-93, 95, 99-101 and 103-104 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication US 2001/0034530 to Malackowski et al. in view of U.S. Patent 5,873,814 to Adair. Malackowski et al. teach a surgical system that includes a handpiece (Fig. 1, # 102) referred to as a smart instrument and a surgical navigation system. The smart instrument may be any number of common surgical instruments that may be tracked by attachment to the universal tracker device (Fig. 3, # 200), including but not limited to a probe, scalpel, suction device, pin, or clamp. In order to couple the tracker device to the general instrument, an adapter is connected to the adapter interface of the universal tracker device and the general instrument is attached by a clamp screw (paragraph 0070). This clearly teaches a removable tracking unit. The means for attaching the tracking unit to the handpiece or surgical instrument is considered an obvious design consideration for one of skill in the art; as such attachment means are pervasive and predictable. The smart instrument may also store the specific geometry of the active part of the smart tool, i.e., the tip or the part of the tool that is in contact with the patient or delivering some kind of energy, mechanical, electrical, sonic, electromagnetic, etc. (paragraph 0080), thus teaching a unit that consumes power and in the case of mechanical energy, implies a bit or cutter that is interpreted as an accessory. Such cutters require a motor. The tracker device includes a plurality of infrared light emitting diodes, a communication transceiver (wireless receiver), and a status light. The smart instruments and the navigation system transceivers communicate via infrared (light energy) signals, although other types of wireless technologies may also be used (paragraph 0059). The properties of the smart instruments, such as geometry and functional features, are preferably graphically displayed on the computer monitor to enable visual display of their spatial and functional relationships to other smart instruments, surgical equipment, and the surgical field (Figs. 25-32). While Malackowski et al. teach a display of the positional

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information, it is not on the handpiece. Adair discloses an endoscope with a handpiece portion onto which is mounted a flat display and further teaches the communications with the display may be wireless (Col. 2, lines 50-54). The video monitor provides a means by which a surgeon may conveniently position a video image of the surgical site in visual alignment with the surgical area, thus the surgeon's ability to manipulate an instrument is greatly enhanced and fatigue is reduced (Col. 15, lines 15-25). Therefore it would have been obvious to one skilled in the art to position the positional information display on the handpiece as taught by Adair in the invention of Malackowski et al. to provide line of sight visualization and reduced fatigue to the operator.

The battery of the tracker and the smart instruments is preferably a lithium battery (paragraph 0069). It is inherent that a power connector be included. The smart instrument of Malackowski et al. may be any electrical power consuming device, which could include low power LED or semiconductor laser devices. The examiner takes the position that a skilled artisan would provide power as appropriate for the devices in the handpiece making this an obvious design choice. Clearly, a skilled artisan would consider the power requirements of the instrument and the impact of a current surge from a high current instrument on other items on a common source. The Applicant teaches the power supplies may be common or separate, thus supporting this position. A skilled artisan would also consider advances in battery and display technology in handpiece design, thus making an LED display a logical and obvious choice.

Claims 75, 78, 97 and 98 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication US 2001/0034530 to Malackowski et al. in view of U.S. Patent 5,873,814 to Adair as applied to claims 71 and 89 above and further in view of U.S. Patent Application Publication US 2002/0035321 to Bucholz et al. Malackowski et al. are discussed above, but do not teach a drill bit with coupling. Bucholz et al. disclose a system for use during a surgical procedure on a body. Using a navigation system (Fig. 11), the positioning

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of an instrument relative to a body can be displayed. One instrument that is used commonly is a drill. By placing emitters (tracking member) on a surgical drill (handpiece), and by having a fixed relationship between the drill body and its tip (usually a drill bit), the direction and position of the drill bit can be determined. The drill bit is interpreted as an accessory (and distal end) and such a bit inherently moves as it rotates and is coupled with a chuck (paragraph 0103). It would have been obvious to one skilled in the art to use the drill as taught by Bucholz et al. in the surgical device of Malackowski et al. and Adair as the use of such cutting instrument is well known and common in the art.

Allowable Subject Matter

Claims 102 and 105 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

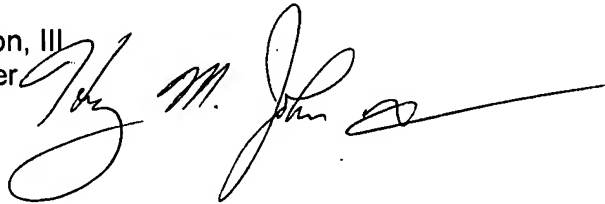
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henry M. Johnson, III whose telephone number is (571) 272-4768. The examiner can normally be reached on Monday through Friday from 6:00 AM to 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C. Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Henry M. Johnson, III
Primary Examiner
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A handwritten signature in black ink, appearing to read "H. M. Johnson", with a long horizontal flourish extending to the right.